IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

REPLY BRIEF FOR THE APPELLANT

Ex parte Kalle Tammi et al.

METHOD AND SYSTEM FOR DEACTIVATING A SERVICE ACCOUNT

Serial No. 10/776,513
Appeal No.:
Group Art Unit: 2453

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Enclosure: Reply Brief

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In re the Appellant:

Kalle TAMI et al.   Appeal No.:

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Filed: February 12, 2004   Examiner: Tariq S. Najee-Ullah

For: METHOD AND SYSTEM FOR DEACTIVATING A SERVICE ACCOUNT

REPLY BRIEF

September 17, 2009

I. INTRODUCTION

This Reply Brief is filed in response to the Examiner's Answer mailed August 17,
2009. In the Examiner's Answer, while no new grounds of rejection are made, comments
and explanations are provided which are tantamount to new points of argument. This
Reply Brief, therefore, is submitted to address these new points of argument, and to
clarify why claims 1-6 and 8-36 of the pending application should be considered to be
patentable over "3rd Generation Partnership Project: Technical Specification Group
Services and System Aspects; IP Multimedia Subsystem (IMS); Stage 2 (Release 5)"
3GPP TS 23.228 v6.0.0, January 2003 (2003-01), pp. 1-28, XP-002279519 and U.S.
Patent Publication No. 2002/0194336 to Kett et al., and, therefore, should be found by
this Honorable Board of Patent Appeals and Interferences to be allowable.

This Reply Brief addresses several deficiencies of the Examiner's Answer.
Appellants' Appeal Brief, however, is maintained, and failure to repeat the arguments

contained therein, or to address one or more argument set forth in the Examiner's Answer should not be construed as waiver or an admission. The Appeal Brief speaks for itself, and this Reply Brief merely supplements the Appeal Brief to address certain aspects of the Examiner's Answer.

II. STATUS OF CLAIMS

Claims 1-6 and 8-36 stand rejected and are the subject of this appeal. In particular, claims 1-6 and 8-36 were rejected under 35 U.S.C. § 103(a) were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over "3rd Generation Partnership Project: Technical Specification Group Services and System Aspects; IP Multimedia Subsystem (IMS); Stage 2 (Release 5)" 3GPP TS 23.228 v6.0.0, January 2003 (2003-01), pp. 1-28, XP-002279519 ("3GPP") in view of U.S. Patent Publication No. 2002/0194336 to Kett et al. ("Kett"). Claim 7 was previously cancelled by Appellants.

III. APPELLANTS' ARGUMENTS

Appellants respectfully submit that each of the pending claims 1-6 and 8-36 recites subject matter which is neither disclosed nor suggested by 3GPP and Kett, whether considered individually or in combination. For example, as discussed in Appellants' Appeal Brief, the combination of 3GPP and Kett fails to disclose or suggest, *"forwarding a request for de-registration from said application server via a direct interface,"* as recited in independent claim 1, and similarly recited in independent claims 8, 20, 25, 32, and 34-36. The Examiner's Answer asserted that Kett teaches a direct

interface between an application server and a registration server. Specifically, the Examiner's Answer asserted that paragraph [0027] and Figure 1 of Kett describes a registration server connected to services nodes 6a, 6b, and 6c (which the Answer interpreted as "application servers") via a direct interface of a core network. (See Examiner's Answer at pages 11-12). This assertion is clearly erroneous as Kett merely describes that registration server 5 is connected to "the network," and is totally silent as to the nature of the connection between registration server 5 and any of the service nodes 6a, 6b, and 6c. (See Kett at paragraph [0027]). This silence is not surprising as the cited paragraph of Kett makes clear that Figure 1 is a high-level overview of the network, and that the implementation details of the connection are further described in subsequent paragraphs and figures of the disclosure. (See Kett at paragraph [0027], "A registration server 5 is connected to the network and, as is further described below, is used in implementing an API (application programmers interface) to network resources").

A further review of the subsequent paragraphs of Kett reveals that Kett fails to disclose or suggest a direct interface between a registration server and an application server. When a client application of service provider platform 4a, for example, is initialized, it first signs-on with a Parlay API via registration server 5, where the registration server 5 authenticates the client application. The client application then requests discovery of a service feature from the registration server. The registration server subsequently returns a service identity of the requested network service of service node 6a, for example), based on the fact that service node 6a has previously registered with the registration server. The application selects the service, signs a digital

agreement with the registration server, and the registration server establishes an interface between the client application and the Parlay service. (See Kett at paragraphs [0030]-[0034]). Thus, Kett describes two interfaces: the interface between the client application and the framework of the registration server, (identified in Figure 4 as interface 4.1); and the interface between the client application and the Parlay service (identified in Figure 4 as interface 4.2). (See Kett at Figure 4). As described in Appellants' Appeal Brief, framework interface 4.1 is an interface between the framework objects in the network domain and the client framework objects in the user domain, and is not an interface between an application server and a registration server, and direct interface 4.2 is an interface between a client application and a Parlay service of the Parlay API, and is also not an interface between an application server and a registration server. Thus, neither interface is a direct interface between an application server and a registration server.

The Examiner's Answer further asserted that the instant specification fails to include a specific definition of "via a direct interface", and, based on this alleged lack of definition, the Examiner's Answer interpreted "via a direct interface" to mean directly connecting the registration server to the application server via any interface. (See Office Action at pages 11-12). As a threshold matter, the Examiner's Answer is incorrect in asserting that the instant specification fails to define "via a direct interface." On the contrary, the specification describes that a direct interface does not involve the interface of an application server with an intermediary object. For example, the specification states:

Accordingly, barring or de-registration can be done via the direct interface between the application server and the registration server. There is thus no need to introduce procedures to the interface between the application server and a call state control functionality of an IP based network. (See Specification at paragraph [0012], emphasis added).

Thus, based on the specification, a direct interface is a interface that connects an application server and the registration server, without the involvement of an interface between the application server and an intermediary object, or an interface between the registration server and the intermediary object. Furthermore, regardless of the definition in the specification, the interpretation of "direct interface" in the Examiner's Answer is not reasonable, based on the plain language of the claim, because it effectively eviscerates the use of the modifier "direct." For example, assume object A interfaces with object B, and object B interfaces with object C. Under the Examiner's interpretation of "direct interface," the two interfaces of object B could be considered a "direct interface," because the two interfaces together provide a direct connection between object A and object C. Thus, the Examiner's Answer's interpretation of "direct interface" ignores the explicit modifier "direct" in the claims, and thus, is not reasonable.

Furthermore, Appellants respectfully submit that the statement of the Examiner's Answer that one of ordinary skill in the art would be motivated to combine the references of 3GPP and Kett to arrive at the claimed invention to improve the function and performance of API implementation in a communication network fails to take into account the substantial differences between Kett and the claimed invention. For example, Kett teaches a registration procedure, rather than a de-registration procedure, and Kett also teaches an API implementation, as discussed above. Thus, the stated motivation would

lead to an API implementation in the registration procedure of the 3GPP configuration, and not to <u>a direct interface between an application server and a registration server</u>, as recited in independent claim 1. Appellants further submit there is no motivation or suggestion in 3GPP which would allow a person of ordinary skill in the art to use the teaching of a <u>registration procedure</u> based on <u>an API implementation</u>, such as disclosed in Kett, in order to provide the de-registration or barring procedure of the claimed invention. Likewise, there is no motivation or suggestion in Kett which would allow a person of ordinary skill in the art to use the teaching of a <u>de-registration procedure</u> <u>without API implementation</u>, such as disclosed in 3GPP, in order to provide the de-registration or baring procedure of the claimed invention.

In response, the Examiner's Answer took the position that Kett is not relied upon to teach de-registration. However, the Examiner's motivation for relying upon a reference to support an obviousness rejection is irrelevant to an obviousness analysis. Instead, the focus of the analysis is whether a person of ordinary skill in the art, at the time the invention was made, would have been motivated to modify or combine the references as the Examiner has suggested to arrive at the instant claims. *See In re Kahn*, 441 F.3d 977, 986 (Fed. Cir. 2006). Thus, the failure to identify why a person of ordinary skill in the art would be motivated to modify 3GPP based on Kett to arrive at the claimed invention, in light of the fact that Kett describes a registration procedure rather than a de-registration procedure constitutes reversible error.

Furthermore, the Supreme Court has articulated that the framework for an objective analysis for determining obviousness under 35 U.S.C. § 103 includes the

following factual inquires: (a) determining the scope and content of the prior art; (b) ascertaining the differences between the claimed invention and the prior art; and (c) resolving the level of ordinary skill in the pertinent art. (See *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). The failure to address the fact that Kett describes a registration procedure rather than a de-registration procedure, as recited in the independent claims, means that the second factual inquiry of *Graham* has not been fully addressed. Thus, the failure to fully address the second factual inquiry of *Graham* also constitutes reversible error.

Additionally, the Federal Circuit has previously held that a prior art reference must be considered in its entirety, i.e., as a whole, <u>including portions that would lead away from the claimed invention</u>. (*See W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert denied* 469 U.S. 851 (1984)). Thus, the Examiner Answer's focus on only a specific portion of Kett (i.e interface), and the lack of consideration of Kett as a whole (i.e. registration procedure) is not consistent with Federal Circuit precedent, and also constitutes reversible error.

In addition, as discussed in Appellants' Appeal Brief, the combination of 3GPP and Kett fails to disclose or suggest, *"forwarding a request for barring from said application server via a direct interface to a registration server,"* as recited in independent claim 11, and similarly recited in independent claims 16-17 and 27. While each of the claims have their own scope, Appellants respectfully submit that the combination of 3GPP and Kett fails to disclose or suggest the aforementioned limitation for similar

reasoning as to why the combination of 3GPP and Kett fails to disclose or suggest *forwarding a request for de-registration from said application server via a direct interface,"* as recited in independent claim 1. Likewise, as discussed in Appellants' Appeal Brief, the combination of 3GPP and Kett fails to disclose or suggest, *"an application server, to which said service account is associated, configured to monitor a status of said service account and to forward via a direct interface a request for barring to said registration server,"* as recited in independent claim 15, and similarly recited in independent claim 30. While each of the claims have their own scope, Appellants respectfully submit that the combination of 3GPP and Kett fails to disclose or suggest the aforementioned limitation for similar reasoning as to why the combination of 3GPP and Kett fails to disclose or suggest *forwarding a request for de-registration from said application server via a direct interface,"* as recited in independent claim 1.

Finally, as discussed in Appellants' Appeal Brief, the combination of 3GPP and Kett fails to disclose or suggest, *"wherein said forwarding step comprises forwarding said request over said interface directly coupling said application server and said registration server.,"* as recited in claim 2, and similarly recited in claims 18 and 21. The Examiner's Answer asserted that 3GPP does disclose the aforementioned limitation. Specifically, the Examiner's Answer asserted that 3GPP teaches a de-registration forwarding step using Sh and Si interfaces. (See Examiner's Answer at page 13). This assertion is erroneous based on the following reasoning.

The Examiner's Answer relied upon two separate portions of 3GPP to support its erroneous position that 3GPP discloses forwarding a de-registration request over a

direct interface directly coupling an application server and a registration server. The Examiner's Answer first relied upon page 43, Figure. 5.5a, which describes that a Serving Call Session Control Function (S-CSCF) sends a de-registration to a Proxy Call Session Control Function (P-CSCF), which in turn informs a user equipment (UE) of the de-registration. The Answer then relied upon pages 16-17, Section 4.2.4, which describes a SH interface between a Home Subscriber Server (HSS) and an SIP application server, and describes a SI interface between the HSS and an IP Multimedia Service Switching Function (IM-SSF). (See Examiner's Answer at page 13; see also 3GPP at pages 16-17 and 43; see also 3GPP at Figure 5.5a). However, neither portion of 3GPP discloses forwarding a de-registration request over a direct interface directly coupling an application server and a registration server.

With respect to the first cited portion of 3GPP, page 43 and Figure 5.5a merely describes that a de-registration is transmitted over a series of interfaces including an interface between the S-CSCF and the P-CSCF, the P-CSCF and the UE, and the S-CSCF and the HSS. (See 3GPP at page 43 and Figure 5.5a). Most importantly, 3GPP fails to disclose an application server, and also fails to disclose a direct interface directly coupling the missing application server to the HSS (which the Examiner interprets as a registration server). With respect to the second cited portion of 3GPP, while pages 16-17 describe a Sh interface between the HSS and the SIP application server, said pages fail to disclose that a de-registration request is sent over the Sh interface. Instead, 3GPP merely describes that service related data and user related information is transported over the Sh interface. (See 3GPP at pages 16-17). Thus, even combining

the cited portions of 3GPP, there is no disclosure or suggestion of transporting a de-registration over the Sh interface.

Finally, 3GPP clearly states that the Si interface is between the HSS and the IM-SSF (as opposed to the HSS and the SIP application server), and clearly states that the Si interface is used to transport CAMEL subscription information (as opposed to a de-registration request). Thus, 3GPP clearly fails to disclose or suggest *wherein said forwarding step comprises forwarding said request over said interface directly coupling said application server and said registration server,*" as recited in claim 2, and similarly recited in claims 18 and 21.

IV. CONCLUSION

In view of the above, Appellants respectfully submit that the Final Office Action set forth clearly erroneous rejections, as 3GPP and Kett, whether considered individually or in combination, fail to disclose, or suggest, all the elements of the present claims.

For all of the above noted reasons, it is strongly contended that certain clear differences exist between the present invention as claimed in claims 1-6 and 8-36 and the prior art relied upon by the Examiner. It is further contended that these difference are more than sufficient that the present invention would not have been obvious to a person having ordinary skill in the art at the time the invention was made.

This final rejection being in error, therefore, it is respectfully requested that this honorable Board of Patent Appeals and Interferences reverse the Examiner's decision in this case and indicate the allowability of application claims 1-6 and 8-36.

In the event that this paper is not being timely filed, the Appellant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees which may be due with respect to this paper may be charged to Counsel's Deposit Account 50-2222.

<div align="center">Respectfully submitted,</div>

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